## Principles of Sylviculture course description

## 1. Course Name:

## **Principles of Sylviculture**

2. Course Code:

## PRSY258

## 2 Semester / Year:

Second Semester / /Spring Semester /2023-2024

3. Description Preparation Date:

## 1/2/2024

## 4. Available Attendance Forms:

Attendance

## 5. Number of Credit Hours (Total) / Number of Units (Total)

2 Theory + 3 practical / 3.5 units (75 hours)

## 6. Course administrator's name (mention all, if more than one name)

Name: Dr. Shahla Abd alrazzak basheer/ Theory Email: <a href="mailto:shahla\_abdalrazak@uomosul.edu.iq">shahla\_abdalrazak@uomosul.edu.iq</a> Mohammed Sameer Idrees/ Practical mohamed.alsawaf@ uomosul.edu.iq

## 7. Course Objectives

#### Theory:

- Developing the student's ability to deal with scientific and technical means
- Developing the student's ability to deal with the Internet
- Developing the student's ability to deal with multiple media.
- Developing the student's ability to dialogue and discuss

Developing the student's ability to deal economically in the field the job.

## **Practical:**

- -Developing the student's ability to deal with multip media.
- Developing the student's ability to dialogue and discuss

8. Teaching and Learning Strategies

## Strategy

- -Interactive lecture, Brainstorming,
- Dialogue and discussion,
- Assigning tasks and reporting
- Assigning group work to reveal leadership skills

# 9. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theory 3 Pract.	Theory: a1: Recognizes the forest, trees, types of trees, shapes of the crown canopy, types of trees, and the characteristic of biological balance. practical::a11 Recognize pure trees	Theory: Forest Sylviculture science practical : Pure stand	Interactive lecture, brainstorming, dialogue and discussion, self-learning and reports	Exams, Homework, Reports
2	2Theory 3 Pract	Theory: A2: Identify the	Theory Benefits of forests	Interactive lecture,	Exams, Homework,

3	2Theory 3 Pract	main and secondary benefits of forests: practical: a12 shows mixed s stand  Theory: a3: Recognizes seed and bare-leaf forests,	Practical: Mixed bstand  Theory: Forests in the world	brainstorming, dialogue and discussion, self- learning and reports Interactive lecture, brainstorming,	Exams, Homework, Reports
		hardwood and softwood forests, broad-leaved and deciduous forests. : practical; a13 Compares needle and broad-leaved species	Practical: Types of forest trees around the world	dialogue and discussion, self- learning and reports	
4	2Theory 3 Pract	Theory:a4: Learn about tropical forests, subtropical forests, cold temperate forests, bamboo forests, mangrove forests. forestspractical: a14: Prepare a report on the types of trees in the needle forest	Theory: Features of world's main forests Practical: Watch a data show about broadleaf forests	Interactive lecture, brainstorming, dialogue and discussion, self-learning and reports	Exams, Homework, Reports
5	3 Pract	Theory: a5: Explains the palm area, the laurel area, the Qastal (chestnut) area, the beech area, the shuh area, and the alpine areas. practical : a15: Distinguish the types of trees in broad-leaved	Theory: Mayer's divisions  Practical Watch a data show about forest forests	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports
6	2Theory 3 Pract	Theory:a6: Shows the climatic regions in the Arab world, tree benefits of forests Practical::a16 Identify the types of deciduous and evergreen forest trees	Theory: Forests in the Arab world  Practical: Watch a data show about deciduous a evergreen	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports
7	2Theory 3 Pract	Theory: a7: Explains the forest areas in Iraq, learns about the administrative distribution of forests in Iraq, types of natural	Theory: Forests in Iraq  Practical: forests in the Arab world	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports

		forests in Iraq and their density, forest problems in Iraq : practical : b2 Discusses the direct and indirect			
8	2Theory 3 Pract	Theory:_a7: Explains the forest areas in Iraq, learns about the administrative distribution of forests in Iraq, types of natural forests in Iraq and their density, forest problems in Iraq.	Theory: Natural boundaries of forests  Practical: Direct a indirect benefits of forest	Interactive lecture, brainstorming, dialogue and discussion, self-learning and reports	Exams, Homework, Reports
		practical : : b2 Discusses the direct and indirect benefits of forests			
9	2Theory 3 Pract	Theory: a8: Leads a panel discussion on the effect of temperatures on the natural boundaries of forests and the spread of tree species Understands the meaning of the imaginary thermocline, the tree line, the alpine border, the border resulting from lack of humidity, the border resulting from low temperature.: practical : b3 Organizes a tour to see the types of trees growing naturally in Iraq	Theory: Vegetation types and tree development stages  Practical: A scientific tour of the Mosul municipal nurseries	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports
10	2Theory 3 Pract	Theory:_a9: Recognizes the classification of vegetation on Earth (woody, grassy, desert plants) and distinguishes the stages of tree development (from the	Theory: Density in forests Practical: Forest products Developmenta processes in the nursery	_	Exams, Homework, Reports

		seedling stage until the old age stage)			
		practical::c3 Classifies the areas of pine and oak forests in Iraq			
11	2Theory 3 Pract	Theory:a10: Discusses the degree of density in forests, its importance for tree growth (shade-tolerant trees and light-loving trees), and the factors affecting the degree of crown density.  practical::c4 makes a field visit to a forest  Nineveh	Theory: Pure and mixed forests  Practical: Planting and dispersing seeds A visit to the Nineveh Forest	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports
12	2Theory 3 Pract	Theory:C1: Explains the factors of location and surroundings and their importance in relation to the type of trees and their natural spread Practical: d4: Tests the seeds and treats them before planting	Theory: Factors affecting forest growth Practical: Development processes in Nineveh forest	discussion, self- learning and reports	Exams, Homework, Reports
13	2Theory 3 Pract	Theory: c2, d1: Distinguishes between maximum and minimum temperatures and the extent of their impact on plant growth. Explains spring freeze and presents the types of trees that are tolerant to freeze and those that are not tolerant to freeze. The phenomenon of bare freeze. practical: d5: Performs developmental operations in the nursery, pruning and weedingt queen	Theory: Climatic factors  Practical: Methods propagating forest trees	Interactive lecture, brainstorming, dialogue and discussion, self- learning and reports	Exams, Homework, Reports
14	2Theory 3 Pract	Theory:e1: Shows the phenomena that occur as a result of the decrease and increase in temperature, such as	Theory:Freeze  Practical: Seed treatme before planting and vitality testing	Interactive lecture, brainstorming, dialogue discussion, s	Exams, Homework, Reports

		physiological d winter death, a burning. practical: d6: I planting bags v	nd bark He fills the			learning and repor	rt
15	2Theory 3 Pract	Theory: e2: D degree of toler and their req	etermines ance of pla uirements xplains oisture (ra pitation), a e of snow explains of tolerar extent of nd on t d displ types that dbreaks.	Practical: D processes in	evelopment		Exams, Homework, Reports
	Evaluation valuation N		Evaluatio	n Data	Degree		Relative
L	valuation iv	Tetilous	Evaluation	m Date	Degree		weight %
F	Final report theory +		Theory 15		7 Theory		% 17
Sh	pract. F nort exam (	_	Pract. 1-1 Week (3)	5 week	6 pract. 4 Theory +		% <sup>7</sup>
	Short exam (1)		,, con (3)		2 pract.		/0
Half exam ( theory + pract.)		Week (9)	10 Theor 5 pract.			% 10	
Sh	Short exam (2)		Week (12			7 +	% ٦
Final exam (practical)		Exam pra	•			% Y ·	
		Exam the	•			% £ .	
					100		% 1
10. Le	arning and	Teaching Resou	irces				
	Princi	ples of Silvicultu	re	Prof .Dr.Yav	zuz Shafia <i>l</i>	AbdullAH/1988	

 $Teacher\ of\ Theory: Dr.\ Shahla\ Abd\ alrazzak\ basheer$ 

**Mohammed Sameer Idrees/ Practic** 

**Chairman of the Scientific Committee:** 

Head of the Dept. of Forestry Sciences:Dr. Muzahim